WHAT IS CLAIMED IS:

1. A recording device for recording first encoded data at a high bit rate and second encoded data at a lower bit rate than that of said first encoded data, both encoded data corresponding to the same material data, on an information recording medium, comprising:

first generation means for encoding said material data input thereto so as to generate said first encoded data;

second generation means for encoding said material data input thereto so as to generate said second encoded data;

recording means for recording said first encoded data generated by said first generation means and said second encoded data generated by said second generation means on said information recording medium in an alternate manner in terms of time; and

readout means for reading out said second encoded data recorded on said information recording medium while said recording means is recording any one of said first and second encoded data.

2. The recording device according to claim 1, further comprising:

storage means for storing said second encoded data recorded on said information recording medium by said recording means; and

comparison means for comparing said second encoded means read out by said readout means with said stored second encoded data.

3. The recording device according to claim 2, wherein

said recording means rewrites said encoded data stored by said storage means on said information recording medium in accordance with a result of comparison by said comparison means.

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4. The recording device according to claim 3, wherein said recording means rewrites said encoded data stored by said storage means in a separate unrecorded area on said information recording medium if a plurality of successive

10 results of comparison by said comparison means show that said data are not identical.

5. The recording device according to claim 1, wherein said recording means performs recording on said

15 information recording medium in a CLV (Constant Linear Velocity) method.

6. The recording device according to claim 1, further comprising reproducing means for decoding and playing

20 back said second encoded data read out by said readout means.

7. A recording method for recording first encoded data at a high bit rate and second encoded data at a lower bit

25 rate than that of said first encoded data, both encoded data corresponding to a same material data, on an information recording medium, comprising:

a first generation step of encoding said material data input thereto so as to generate said first encoded

30 data;

a second generation step of encoding said material

data input thereto so as to generate said second encoded data;

a recording step of recording said first encoded data generated in said first generation step and said
5   second encoded data generated in said second generation step on said information recording medium in an alternate manner in terms of time; and

a readout step of reading out said second encoded data recorded on said information recording medium while
10   any one of said first and second encoded data is being recorded in said recording step.

8. A recording medium on which a program readable by a computer is recorded, said program being for recording
15   first encoded data at a high bit rate and second encoded data at a lower bit rate than that of said first encoded data, both encoded data corresponding to a same material data, on an information recording medium, said program comprising: a first generation step of encoding said
20   material data input thereto so as to generate said first encoded data;

a second generation step of encoding said material data input thereto so as to generate said second encoded data;

25   a recording step of recording said first encoded data generated in said first generation step and said second encoded data generated in said second generation step on said information recording medium in an alternate manner in terms of time; and

30   a readout step of reading out said second encoded data recorded on said information recording medium while

any one of said first and second encoded data is being recorded by the process at said recording step.

9. A program for recording first encoded data at a high bit rate and second encoded data at a lower bit rate than that of said first encoded data, both encoded data corresponding to a same material data, on an information recording medium, the program making a computer execute a process comprising:

a first generation step of encoding said material data input thereto so as to generate said first encoded data;

a second generation step of encoding said material data input thereto so as to generate said second encoded data;

a recording step of recording said first encoded data generated in said first generation step and said second encoded data generated in said second generation step on said information recording medium in an alternate manner in terms of time; and

a readout step of reading out said second encoded data recorded on said information recording medium while any one of said first and second encoded data is being recorded in said recording step.